REMARKS

The examiner rejected Claims 1, 2, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choy et al., US 6,695,770, in view of Yee et al., US 6,016,385, and in further view of Boulanger et al., US 6,583,808. The examiner stated:

> (Claims 1 and 15) Choy et al. discloses a virtual reality encounter system comprising: a mannequin coupled to a computer system wherein the mannequin is fitted with appropriate sensors that are connected to the computer system to transmit to another location and user device over a network (column 3, lines 23-25), a headset, to display morphing animations and animated textures on the appropriate avatar (column 9, line 65-column 10, line 6). Choy does not disclose the use of a camera coupled to the mannequin. However, Yee et al. teaches a robot system wherein an operator controls the robot and receives sensory information from the robot, including a camera coupled to the robot for receiving a video image (Figure 3, camera is 22), the camera sending the video image to a communication network (Figure 1), a processor for morphing the video image (column 5, lines 11-40), and the user having a set of goggles to display a morphed video image to the user (column 5, lines 11-37). Further, Boulanger et al. teaches that it is well known in the art of video processing to create a stereo pair of video images separated by a nominal intercular spacing of a participant, or to morph a multi-view transformation for a respective participant's view to create a more realistic virtual meeting (column 4, line 64-column 5, line 6).

Claim 1, as amended, is patentable over the combination of references. Claim 1 calls for ... a camera coupled to the mannequin, the camera capturing an image of a first, physical location in which the mannequin is disposed... a processor that receives the first video image and morphs the first video image ... to send ... to a communications network and receive a second, video image from the communications network, the second video image of a second, different physical location and a set of goggles to display the second video image of the second, different physical location. No combination of Choy, Yee, and Boulanger either describes or suggests this combination of features.

In particular, no combination of these references describes or suggests ... a processor that receives the first video image and morphs the first video image ... and receive a second, video image ... of a second, different physical location and a set of goggles to display the second video image of the second, different physical location.

The examiner uses Choy to teach "...a virtual reality encounter system comprising: a mannequin coupled to a computer system wherein the mannequin is fitted with appropriate sensors that are connected to the computer system to transmit to another location and user device

over a network (column 3, lines 23-25), a headset, to display morphing animations and animated textures on the appropriate avatar (column 9, line 65-column 10, line 6)."

Choy is directed to a virtual reality system, Applicant's claim 1 in contrast is directed to a virtual reality encounter system. While Choy discloses a mannequin, Choy does not disclose a camera coupled to the mannequin, which the examiner acknowledges and uses Yee to teach. However, Yee while including a camera mounted on a robot; no combination of Choy with Yess suggests the processor that receives the first video image and morphs the first video image … and receives a second, video image … of a second, different physical location and a set of goggles to display the second video image of the second, different physical location.

In addition, while Choy may describe "a headset, to display morphing animations" and Yee may describe "the user having a set of goggles to display a morphed video image to the user (column 5, lines 11-37)," as contended by the examiner, no combination of Choy with Lee suggests the claimed combination, namely a processor that … morphs the first video image … to send … to a communications network and receives a second, video image from the communications network … and a set of goggles to display the second video image.

In the combination of Choy with Lee, the goggles of Yee will display the location of the mannequin, e.g. the first location corresponding to the video image captured by the camera in claim 1. The operator in Yee would not be concerned with sending to the location of the robot in Yee any image of the second location, e.g. of that of the operator. In addition, Choy does not display images of physical locations, but instead displays virtual images.

The examiner uses Boulanger to teach that it is well known "…to create a stereo pair of video images separated by a nominal interocular spacing of a participant, or to morph a multi-view transformation for a respective participant's view to create a more realistic virtual meeting (column 4, line 64-column 5, line 6)." Applicant contends that assuming that this teaching is found in Boulanger, that teaching has no relevance to claim 1 and moreover, does not cure the deficiencies in the combined teachings of Chou and Yee.

Applicant has made corresponding amendments to claim 15, which now calls for a method of having a virtual encounter, including receiving a first video image from a camera coupled to a mannequin, … disposed in a first physical location, morphing the first video image, sending the morphed video image over a communications network, receiving a second video

image from a ... second physical location and rendering the second video image using a set of goggles ... . For analogous reasons discussed in claim 1, claim 15 is allowable over the combination of references.

Claims 2-14 and 16-25 are allowable over the cited references at least for the reasons discussed in their respective base claims

The examiner rejected Claims 3-7, 11,12, 17-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choy et al. in view of Yee et al. and Boulanger et al. as applied to claims 2 and 16 above, and further in view of Dundon, US 7,046,151.

The examiner relies on Dundon to teach "an interactive body suit ..." Applicant contends that these claims are allowable over the art at least for the reasons discussed for claims 1 and 15, since Dundon does not cure the deficiencies of the base references.

The examiner rejected Claims 8, 9, 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choy et al. in view of Yee et al., Boulanger et al., and Dundon as applied to claims 7 and 20 above, and further in view of Abbasi, US 6,786,863.

The examiner relies on Abbasi to teach: "a remote physical encounter system and method comprising a second mechanical surrogate with external sensory devices including a second camera and a second microphone and sending the signals to a communications network (Figure 1)." Applicant contends that these claims are allowable over the art at least for the reasons discussed for claims 1 and 15, since Abbasi does not cure the deficiencies of the base references.

Nowhere does Abbasi disclose a mannequin having life-like features. Indeed, Abbasi describes features 50 and 55 as: "Further comprising the system are mechanical surrogates 50 and 55. The mechanical surrogates can comprise replicas of human anatomical components. The mechanical surrogates further comprise sensors and actuators needed to mimic natural human contact." Abbasi describes that the mechanical surrogates comprise components for instance, "sensory perceptions registered by the first computer 15 are reflected on the human lip surrogate attached to the second computer 25."

Accordingly, is it not taught in Abbasi to provide a mannequin having life-like features and no combination of these references would suggest the desirability of the arrangement claimed in claim 1 or claim 8. Abbasi appears to merely teach replicas of human components,

not a mannequin with life-like features. Abbasi does not disclose that the mannequin comprises a body and a camera coupled to the body the camera for sending video signals to a communications network. Abbasi discloses that "Each computer interfaces to a plurality of external sensory devices including, but not limited to a video camera (35A and 35B), a microphone (40A and 40B), and a speaker (45A and 45B). These sensory devices can be used optionally, collectively or in any combination." But nowhere are they disclosed as part of the mannequin.
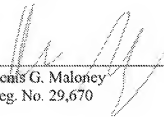
Claim 8 requires a second humanoid robot in the second location, the second robot having a second microphone and a second camera and a second set of goggles to receive the first video image signals from the first camera and a second earphone to receive the audio signals from the first microphone. While Abbasi mentions: "Once the compressed video arrives at the second computing device, it is presented on a graphic display. This provides a visual perception of the contact episode embodied in the manipulation of the mechanical surrogates." Abbasi does not teach a set of goggles. Rather, Abbasi teaches a display attached to the computer as disclosed in FIG. 1.

Accordingly Claims 8, 9, 10 and 14 are allowable over the cited references.

Please charge excess claim fees of **$25** to deposit account 06-1050. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date:_____

Denis G. Maloney
Reg. No. 29,670

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

21611556.doc